were neutropenic (47%). The underlying disease was leukemia (47%), solid tumor (38%), and lymphoma (16%). Most (64%) of these pts with *C. glabrata* fungemia received fluconazole prophylaxis prior to the onset of fungemia. Disseminated infection occurred in 37 pts (39%), while 15% of all *C. glabrata* fungemia infections were catheter-related. Breakthrough candidemia on amphotericin B or liposomal compound regimen occurred in 10 pts, 5 of whom had disseminated infection. *C. glabrata* fungemia was the primary cause of death in 13 pts {14%), and was a contributory factor to death in 29 other pts (39%). In conclusion, *C. glabrata* fungemia in immunocompromised cancer pts is associated with a high frequency of dissemination and mortality. This infection should be considered in any febrile neutropenic immunocompromised cancer pt receiving fluconazole.

The treatment of febrile neutropenia (FN) in children with hematological malignancies

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Two hundred and sixty episodes of FN in 149 children (aged 15–16 years), with acute myeloblastic leukemia (AML–43 cases) and acute lymphoblastic leukemia (ALL–106 cases) during the last 10 years were analyzed. Cytostatic therapy consist of mBFM-87 AML and mBFM-90 ALL protocols. The fourth degree of FN occured in 90% of cases of AML and in 53% of ALL. The infection sites\diseases were: blood + central venous catheter 12.3%, respiratory tract (pneumonias) 18.8%, enteritidis 8.1%, stomatitis 5.4%, soft tissue abscesses 4.2%, acute otitis- 1.9%, pyelonephritis 0.8%, viral infection 3.1%. FUO was found in 45.3% of cases. Pathogens (91 strains) isolated from blood (and central venous catheters) for the last 10 years were: Gram (+) 64%, Gram (−) 29%, Fungi 7%. *CNS* were isolated in 64%, *Streptococcus spp.* in 14%, *S.aureus* in 22% of cases among Gram (+) pathogens. Gram (−) strains were: *KES* 41%, *P. aeruginosa* 23%, other 36%. Fungi consisted of *Candida spp.* mainly, *Aspergillus spp.* were found in 5.9% of cases. The number of MRSA and MR-CNS isolated from all pathological materials were 25% and 70%. The level of this pathogens was significantly higher ($p<0{,}001$)in 1990–1995 than in 1996–2000: 9% vs 25% for MRSA and 7% vs 70% for MR-CNS. For the empirical treatment of FN standard antimicrobial regimens were used: 1st line carbapenems or ceftazidime or cefepime, 2nd line vancomicin, 3rd line ampho B were used in recommended for this patients doses. Clinical efficacy of the 1st line was: 57% and 60% (ALL) vs 31% and 33% (AML) after cephalosporin's 3–4 generation and carbapenem's used respectively. The clinical result for the 2nd line was: 28% for ALL and 50% for AML. The 3rd line of therapy demonstrated very high response rate for ampho B: 91% for ALL and 80% for AML. 32% of children with AML and 5.2% children with ALL died because of sepsis. The investigation of viral infections shows that 100% of patients were infected with VEB and HV-6 type with a clinical symptoms in 23.8% of them. 4.8% of patients were infected by CMV. The treatment with ganciclovir was successful in all cases. Thus, abovementioned treatment of FN in children with ALL and AML show very high efficacy of this treatment. Very high rate of death for AML children make sense that the combination of vancomycin and ampho B at the 2nd line of therapy are useful.

A six-year surveillance of antimicrobial resistance of *Pseudomonas aeruginosa* to ceftazidime compared to other antimicrobials in a cancer hospital

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Resistance patterns of 822 strains of *P. aeruginosa* isolated from cancer patients in 1996–2001 were analysed. Resistance to widely used antimicrobial – ceftazidime (CAZ) – was 29.5% in 1996–1997; 31.5% in 1998–1999 and 22.3% in 2000–2001 ($p<0.01$–0.001). Decreasing of resistance level to CAZ may be explained by increasing usage of cefepime (CPM) in the last 2.5 years. Resistance of *P. aeruginosa* to CPM in 2000–2001 didn't differ significantly from that of CAZ (17.2% vs 22.3%, $p>0.05$). Imipenem (IMP) in 2000–2001 was significantly more active compared to CAZ (12.9% vs 22.3%, $p<0.0001$). Higher level of resistance of *P. aeruginosa* compared to CAZ was seen in 2000–2001 to cefoperazone (49.4% vs 22.3%, $p<0.0001$), amikacin (43.0% vs 22.3%, $p<0.0001$), ciprofloxacin (57.5% vs 22.3%, $p<0{,}0001$) and meropenem (39.3% vs 22.3%, $p<0.0001$). Resistance rate to last three antimicrobials increased during last 6 years: amikacin – from 16.7% to 43.0%, ciprofloxacin – from 28.9% to 57.5%) and meropenem – from 17.8% to 39.3% ($p<0.0001$ for all comparisons). Resistance rate of *P. aeruginosa* to CAZ during 2000–2001 was the highest in ICU compared to all departments of the hospital (33.3% vs 22.3%, $p<0.01$). Higher rate of resistant strains of *P. aeruginosa* was found in 2000–2001 in bronchoscopic materials (34.3%, $p<0.02$) than in other ones. Thus, the surveillance data show that only three from above mentioned antimicrobials (CAZ, CPM, IMP) maintain their activity against *P. aeruginosa* strains isolated from cancer patients in our hospital. Massive usage of other antibiotics such as amikacin, ciprofloxacin and meropenem resulted in progressive loss of susceptibility to them. Probably rational restriction policy is needed.